

**Work Order ID 119588**

Friday, May 16, 2014 1:40:50 PM

**\*119588\***

Page 1

Item ID: D3564-13

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Stainless Steel Wearpad Fwd

Stop

**\*NS2\***

Start Date: 5/22/14 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 5/22/14 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals: Process Plan: MLSDate: 14-05-23

Tooling:

Date:

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3564	Rev D

100 0.00

**\*100\***

FLOW WATER JET

Waterjet

FLOW CNC Waterjet

Memo 0.00

1-Cut as per Dwg D3564 Dwg Rev: 0 Prog Rev: 0 2-  
Deburr if necessary22 0 Jy14-05-24  
mm

304 .063"

110

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*110\***

QC

Quality Control

0.00

22 0 Jy14-05-24  
mm

120

QC8- Inspect parts - second check

0.00

**\*120\***

QC

Quality Control

0.00

DAS  
27  
89  
M/S/J/T

22 \_\_\_\_\_

DQA: \_\_\_\_\_

Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

Work Order update only 

Work Order: _____			<b>DISPOSITION</b>		<b>AGAINST DEPARTMENT/PROCESS</b>						
Part No. _____			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
Suspected Unapproved <input type="checkbox"/>			Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced							
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up							
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure							
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld							
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled							
Crushing	Countersink	Misaligned/off center	Positioned Wrong								
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	Other							
Inspection Strip in Tube	Drawing	Misread									
Marks/Chatter	Drill Holes	Off-set									
Turning Sequence	Finish	Out of Calibration									
Wave/Twist in Tube	Fit/Function	Out of Sequence									

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Start Qty: 12.00

**\*12\***

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Required Date: 5/22/14

Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 <b>*130*</b> Brake NC	NC BRAKE Memo	0.00		DAS 30 9-89		22			14/05/27
	Deburr if necessaryForm on Brake as per Dwg D3564 using Jigs DT 8179								
140 <b>*140*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00	DAS 27 9-89			22			
			14/5/28						
150 <b>*150*</b> Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QS1005 4.3 M123008 Memo START TIME: <u>2:20</u> FINISH TIME: <u>2:50</u> OVEN TEMPERATURE: <u>250</u>	0.00				22	Ø 11-6-2	24	24

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**Work Order update only 

Work Order: _____ Part No. _____ NCR No. _____				<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function		<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence		<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

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Page 3

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**\*N900040100\***

Setup Start

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Item Name: Stainless Steel Wearpad Fwd

Stop

**\*NS2\***

Start Date: 5/22/14

Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 5/22/14

Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC3- Inspect Part Finish

0.00

SPH

**\*160\***

QC

Quality Control

0.00

MSI3

22

170

Identify as per dwg & Stock Location: FP-001

0.00

**\*170\***

Packaging

Packaging

0.00

x22 f all 14/06/03

180

QC21- Final Inspection - Work Order Release

0.00

**\*180\***

QC

Quality Control

0.00

ML9 14-06-03

DQA:

Date:



QA Closed:

Date:

## WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only 

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Suspected Unapproved	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Design										
Doc/Data										
Equip/Tooling										
Handling/Pre										
Material										
Operator										
Offset/Setup										
Process										
Supplier										
Training										
Transport										
Unapproved										
FAULT CATEGORY										
Landing Gear			General							
			Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence		Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled			
								Other		
H:\FORMS\Quality Assurance\approved QA/NCRWO RevH										

# Picklist Print

Friday, May 16, 2014 1:40:54 PM

Page 1

Work Order ID: 119588

\*119588\*  
\*D3564-13\*

Parent Item: D3564-13

Parent Item Name: Stainless Steel Wearpad Fwd

Start Date: 5/22/14

Required Date: 5/22/14

Start Qty: 12.00

Required Qty: 12.00

**Comments:**

IPP Rev:A New Issue 07-03-08 ec  
IPP Rev:B As per Rev C 07-07-09 JLM  
IPP Rev:C As per Rev D 07-09-09 JLM Verified By:EC  
IPP Rev:D Comments revised on Step 5, 6 per B44657 09-02-04 KJ  
Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	300.7670	0.222	3	**		

\*M304S16GA\*

304/316 Sheet .063

Jm14-05-24

Location	Loc Qty	Loc Code
MAT020	300.767	
M127821	75.567	
M128423	1.2	
M129192	224	129,92

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Date:



# **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Date:

## Work Order update only

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS																																						
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>																																				
Part No. _____																																												
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Equip/Tooling <input type="checkbox"/>	Handling/Pre <input type="checkbox"/>																																											
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Offset/Setup <input type="checkbox"/>	Process <input type="checkbox"/>																																											
Supplier <input type="checkbox"/>	Training <input type="checkbox"/>																																											
Transport <input type="checkbox"/>	Unapproved <input type="checkbox"/>																																											
FAULT CATEGORY																																												
Landing Gear			General																																									
Bending <input type="checkbox"/>	Centre Not Concentric <input type="checkbox"/>	Cracks <input type="checkbox"/>	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Cuffs <input type="checkbox"/>	Crushing <input type="checkbox"/>	Heat Treat <input type="checkbox"/>	Inspection Strip in Tube <input type="checkbox"/>	Marks/Chatter <input type="checkbox"/>	Turning Sequence <input type="checkbox"/>	Wave/Twist in Tube <input type="checkbox"/>	Bend <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Burrs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Countersink <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Drawing <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Finish <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Grain <input type="checkbox"/>	Hardware <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Misread <input type="checkbox"/>	Off-set <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Pressure/Forced Set-up <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	Weld <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	Other <input type="checkbox"/>

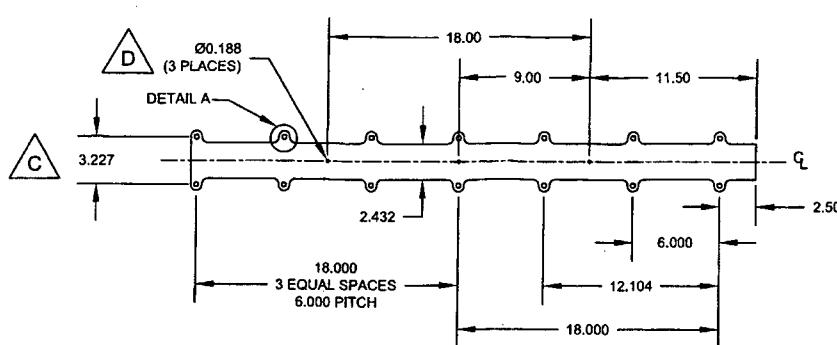
DART AEROSPACE LTD	Work Order:	11958X
Description: Wearshoe	Part Number:	D3564-13
Inspection Dwg: D3564	Rev: D	Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

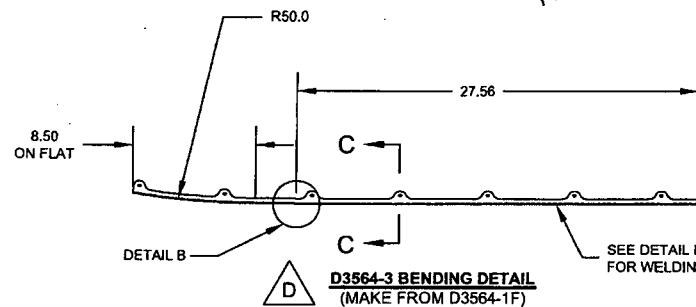
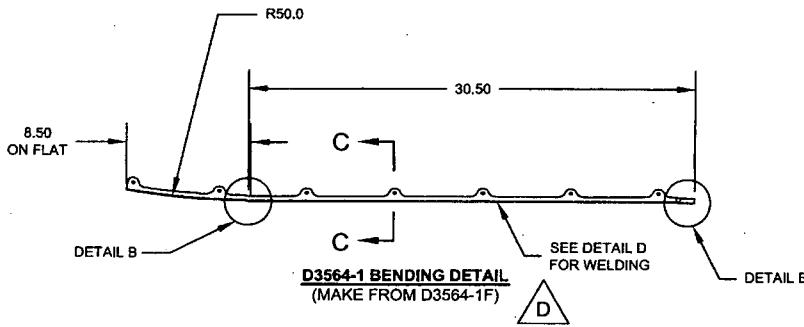
Measured by:	JM	Audited by:	DAS 27	Prototype Approval:	N/A
Date:	4-05-24	Date:	4-89 10/15/27	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.04.02	New Issue	KJ/JLM	
B	07.07.18	Dimensions updated per Dwg Rev. C	KJ/JLM	
C	08.02.28	Dwg Rev updated	KJ/DD	✓ ✓



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 119588 MUS

**RELEASED**  
07.09.04 *[Signature]*



~~UNDER REVIEW~~ ~~11/11/04~~ ~~Finish change~~ OK 11/11/04

**D3564-1/-3/-5/-7/-9/-11/-13/-15 WEARPLATE NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)  
(REF DART MATERIAL SPEC M304S16GA)
  - 2) FINISH: POWDER COAT GREY SANDEX (REF 4.3.5.6) PER DART QSI 005 4.3
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: SEE TABLE IN ZONE A3
  - 8) WELD PER DART QSI 004
  - 9) SEE PG 3 FOR SECTIONS AND DETAILS
  - 10) PARTS ARE SYMMETRIC ABOUT C

<u>WEIGHTS:</u>	
D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

D	UPDATE DRAWING TEMPLATE; CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8, UPDATE NOTES; PG1 A8, PG3 B5, C5; ADD D3564-15; PG1 B6,B3: D3564-9/-1 WAS ONE FIGURE; PG2 A7, A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7, A3: D3564-9/-11 WAS ON PG1; PG3 B8,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5,7,B2: RELOCATE DETAILS AND SECTION; PG3 A5,7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21	
	MOVE TAB OUTBOARD, DETAIL A		PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20	
A	NEW ISSUE	PH	06.12.18	
REV.	DESCRIPTION	BY	DATE	
DESIGN	<i>PH</i>	<b>DART AEROSPACE LTD</b> HAWKSLEY, ONTARIO, CANADA		
DRAWN	<i>CB</i>			
CHECKED	<i>PH</i>	DRAWING NO.	REV. D	
MFG. APPR.	<i>SI</i>	D3564	SHEET 1 OF 3	
APPROVED	<i>SI</i>	TITLE	SCALE	
DE APPR.	<i>SI</i>	WEARSHOE	1:8	
DATE	07.08.21	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE WHATSOEVER BY ANY PERSON OTHER THAN WRITTEN PERMISSION FROM DART AEROSPACE LTD		

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